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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/814,552	03/22/2001	Henry H. Wheeler JR.	7014-101	4477

7590 06/17/2003

Terri L. Sale, Esq.
FULBRIGHT & JAWORKSI L.L.P.
29th Floor
865 South Figueroa Street
Los Angeles, CA 90017-2576

[REDACTED] EXAMINER

SERGENT, RABON A

[REDACTED] ART UNIT [REDACTED] PAPER NUMBER

1711

DATE MAILED: 06/17/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/814,552	WHEELER ET AL.	
	Examiner	Art Unit	
	Rabon Sergeant	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 26 March 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-46 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All
 - b) Some *
 - c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4</u> . | 6) <input type="checkbox"/> Other: _____ |

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1. Claims 13 and 15-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Despite applicants' response, the language, "polymeric reactant material", is ambiguous. The language is confusing, because it can be interpreted that the reactants are themselves polymeric.

2. Claim 22 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Clear support has not been found for the subject matter of amended claim 22.

3. Claims 18-22 and 34-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicants have failed to provide a basis for the claimed weight percents. When a percent value is specified, the basis for the value must be clear. For example, is the weight percent of the fibrous material based on the weight of the structure or polyurethane resin or polyurethane foam? For an example of a weight percent basis, see claim 29.

Furthermore, within claim 22, the language, "a panel between said first or second layer" is ambiguous. Since the layers are specified in the alternative, it is unclear what the panel is between.

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4. Claims 37-46 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicants have failed to adequately describe the term, "porous geotextile fabric". It is unclear what constitutes a porous geotextile fabric. Applicants' response has not clarified the issue.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

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invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-3, 5, 8, 10-12, 14, 34, and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Kotschwar ('575).

Patentee discloses two-component sprayable polyurethane compositions, wherein a fiber reinforcing material is added to the polyol component, before the polyol component is mixed with the polyisocyanate component and ejected through a spray nozzle. Patentee additionally discloses quantities of fiber material and heating of the components, which meet applicants' claims. See abstract; column 2, lines 25+; column 7, lines 30+; column 8; and column 9, lines 61+. Furthermore, patentee discloses at column 9, lines 19-27 that structural fiber reinforced products may be produced by adding water to the composition so as to produce a foam, and further that the foam may be sandwiched between two layers of the fiber-reinforced material.

7. The examiner has considered applicants' response; however, the response is insufficient to overcome the prior art rejection. Despite applicants' argument, Kotschwar clearly discloses that the fiber material can be added to the polyol component prior to combining it with the polyisocyanate component. See column 7, lines 59-61 and column 8, lines 10+.

8. Claims 4, 6, 7, 9, 13, 18-33, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotschwar ('575), further in view of Cotts et al. ('569).

As aforementioned, Kotschwar disclose sprayable polyurethane fiber reinforced compositions and their use in the production of reinforced structural laminates; however,

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patentee fails to teach such features as the reduced quantity of fiber within claim 7, for example, the prewetting of the fibers, the use of a 1:1 volumetric ratio, the mixing of the fibers into both the polyol and the polyisocyanate sides, and the coating of an existing reinforcement structure with a foamed reinforced composition, and the subsequent coating with a non-foamed fiber reinforced composition. Still, the position is taken that each of the aforementioned features constitutes an obvious modification of Kotschwar, well within the capabilities of the skilled artisan. Specifically, it would have been obvious to operate at any quantity of fiber reinforcement that does not exceed the disclosed maximum amount, as one would have expected virtually any level of fiber within the composition to yield positive and desirable properties. The prewetting of the fibers would have been obvious, as one would have expected the wetted fibers to be more compatible with the components. Additionally, it would have been obvious to operate at a 1:1 volumetric ratio, because such a ratio would have simplified the delivery and metering of the components through the system. Also, the position is taken that it would have been obvious to incorporate the fibers into either or both sides of the composition, depending on preference; though less preferred, the reference does disclose that additives may be incorporated into either side. Lastly, the disclosure at column 9, lines 19-27 is considered to render applicants' coating of an existing structure with both a reinforced foam and a reinforced non-foamed material obvious.

9. Though Kotschwar discloses several suitable fiber materials, patentee is silent regarding the use of KEVLAR; however, the use of KEVLAR within polyurethanes to increase physical

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properties was known at the time of invention. This position is supported by the teachings of Cotts et al. As a result, the position is further taken that it would have been obvious to utilize KEVLAR as the fiber reinforcing material within Kotschwar, so as to arrive at the instant invention.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (703) 308-2982.

R. Sergent
June 15, 2003


RABON SERGENT
PRIMARY EXAMINER